

Abstract of the Disclosure

A method for forming a thermal oxide layer on the surface of a semiconductor substrate exposed during a semiconductor fabricating process. The thermal oxide layer is to be thin to minimize silicon substrate defects caused by volume expansion. A chemical vapor deposition (CVD) layer is then formed on the thin thermal oxide layer, creating a required thickness. The thin thermal oxide layer and the CVD material layer are formed in the same CVD apparatus. As a result, a process can be simplified and a particle-leading pollution can be prevented.